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FRONT COVER

Indonesian Harvest Ceremony

Food habits are closely associated with religious practices the world over. Pictured here are a farm woman and a priest of Katen Village, Java, taking part in a harvest ceremony. After traditional prayers, the priest cuts the first 10 heads of rice and bundles them together. This is called the Mantenan, or the wedding of crops ceremony. (Photo courtesy of United Nations.)

BACK COVER

Food and Agriculture Organization of the United Nations—Its Locations and Activities

This map shows the extent of FAO's activities, which are directed toward making a better-clad, better-housed, and better-fed world.

NEWS NOTES

Corn Found Enemy Of Abaca Growers

Philippine farmers are being warned, on the basis of new research results, of the dangers of the traditional practice of planting abaca (Manila hemp) with other farm crops such as corn. Such interplanting is said to make it practically impossible to control abaca mosaic, a leaf disease that is seriously damaging production of this important export fiber crop in the Philippine Islands.

The report comes from Dr. Otto A. Reinking, adviser to the Philippine Department of Agriculture and Natural Resources. Dr. Reinking, former plant pathologist of Cornell University, represe the United States Department of Agriculture Philippines in connection with the Point Fo gram of technical cooperation.

Dr. Reinking and his colleagues have found corn, garden vegetables, weeds, etc., are host aphids which in turn are capable of transmittin the mosaic disease to abaca. In order to control the disease, they advise that abaca must be planted by itself and modern disease-control, insect-control, and sanitation measures must be employed.

"The time when any small growers could plant abaca with other crops has passed," they conclude. "It must be realized now that to grow abaca successfully a farmer must know the basic principles of disease control and plan his operations accordingly. It will be only in those regions where the control factors of disease are taken into consideration that abaca can be grown with profit. Until this is fully understood the industry cannot advance and be placed on a sound footing."

Abaca mosaic disease first appeared in the Philippines in 1933. It has been especially severe since World War II. The Government has embarked upon a wide-scale campaign to try to bring it under control and thus save a leading agricultural industry of the Islands.

Credit for photographs is given as follows: pp. 91, 93, FAO; p. 104, ECA; p. 111, United Nations.

FOREIGN AGRICULTURE ALICE FRAY NELSON, EDITOR

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Moving Day for FAO

by THOMAS E. STREET

Last month FAO, the Food and Agriculture Organization of the United Nations, completed the herculean job of moving from its temporary headquarters in Washington to its permanent site in Rome. The intricate problems of moving an international organization merit a fairly detailed description.

How FAO happened to be moving in the first place is part of the story that goes back to FAO's beginning in October 1945. The constitution that was drawn up at that time provided that the Organization should have its headquarters at the same place as the United Nations. But when, in 1946, the United Nations chose New York for its permanent home, FAO's conference of member governments was not disposed to follow. They considered a skyscraper in New York the least logical place for the focal point of world knowledge and action on food and agriculture, and during the Organization's next three annual conferences—at Geneva in 1947 and at Washington in 1948 and 1949—delegates discussed and debated the choice of a permanent site.

Finally, in the last week of the Conference in November 1949, at 12:30 o'clock in the morning, after struggling through a welter of parliamentary, financial, intellectual, and social considerations, the delegates amended the constitution and accepted the generous invitation of the Government of Italy to locate the permanent headquarters of FAO in Rome.

As soon as the die had been cast, FAO began to set up and put in motion the machinery that was to bring the move off a year and a half later. Immediately problems began cropping up in such fearsome number and complexity as almost to threaten the healthy growth of the Organization. Fortunately, FAO's Director-General Norris E. Dodd has the patience and fortitude he developed in years of experience as a farmer in his native Oregon and as a top administrator in the United States Department of Agriculture. And he has a staff of able assistants. Notable among them is Deputy Director-General Sir Herbert Broadley, who has long experience with the British Ministry of Food and with other international organizations. Together they attacked the problems of the move with vigor.

The financial problem loomed first and largest. Although, in the long run, the terms offered by the Italian Government would mean a saving in the money spent for rent, the immediate problem of financing the move itself created a financial crisis. The original estimate of what it would cost to take FAO to Rome was $1.3 million, which was subsequently revised upward by another $300,000. And the Organization did not have anywhere near that much money on hand. Its budget is a slender $5 million, which is less than the budget of a small bureau of the United States Department of Agriculture, or of a State experiment station. Also, the funds actually available amount to less than the

Moving time at the home of Emil Corwin, Information Officer. The Corwin family is one of 185 FAO families that are moving to Rome.

Mr. Street is Assistant Secretary, U. S. FAO Interagency Committee.

budget, since some of the member governments have difficulty in paying their contributions.

Somehow, somewhere, money had to be found to pay for the move. The Director-General, the Headquarters Advisory Committee that the 1949 conference had set up to help arrange the move, and others concerned engaged in a protracted canvassing of available sources of funds. Eventually they negotiated a loan of $800,000 from the United Nations; and this, plus money made available from sources within FAO itself, such as its own pension and working-capital funds, provided what was hoped would be enough to pay for the move.

But even while it was still being harrassed by financial worries, FAO found that the problem of future office space was far from solved. On the surface, this would seem no problem at all, with a whole building being completed in Rome. It had been started by Mussolini to house the Ministry of African Colonies and, judging by its outside dimensions, seemed entirely adequate. But when FAO sent its administrative people to look at it, they found that the arrangement of the interior made the usable space far from enough for FAO's requirements.

At this point the full extent of the Italian Government's genuine interest in FAO's welfare demonstrated itself. The Italian committee that had been set up to negotiate with FAO suggested constructing another building to be available to FAO under the same terms as the first one. The terms are a nominal rental of $1 per year. This building will provide conference facilities and house the library. The magnanimous offer was approved by the Italian Government and, needless to say, by FAO. The second building is to be ready this fall, in time to be used for FAO's annual conference in November.

Throughout these and other negotiations the Italian Government displayed a hospitality that went far beyond the requirements of its agreement. It also is paying one-third of the cost of transporting FAO's people and equipment, provided the move be made on Italian ships and outside the tourist season. This last, in itself, was a major aid in easing the financial strain on the Organization.

Another matter that had to be arranged with the Italian Government was the terms of FAO's occupancy of the site in Rome. This required some protracted sessions in which a Headquarters Agreement was drawn up. Since FAO has the diplomatic status of a separate country, this Agreement takes on the proportions of a treaty between two sovereign countries. For example, it grants extraterritoriality to FAO headquarters. The headquarters is under the control and authority of FAO and is inviolable to entry by any official of the Italian Government without the consent of the Director-General. The Agreement also covers FAO's rights and rates of communication, exemption from customs duties and restrictions on imports and exports, freedom from direct taxation, rights of currency conversion, unhindered transit of FAO personnel, and a whole series of privileges and immunities for FAO personnel, government representatives to FAO, and other people having business with FAO.

A modern-day note was introduced in the negotiations when the question arose whether FAO should have the right to do its own broadcasting. That right was granted, to be exercised in conformity with technical arrangements to be made with the International Telecommunications Union. Finally the Agreement was worded to the satisfaction of representatives of both the Italian Government and FAO and initialed by them in September 1950. It was subsequently approved by FAO's Council and by the Italian Parliament.

Personnel problems began to crop up almost as soon as the others; but, unlike the others, they cannot end with voting a budget or signing an agreement. These are perhaps the most serious of problems; for, after all, an organization is more than money and office space and an agreement on how to occupy that space. It is primarily people. By 1950 FAO's staff had grown to 600 men and women who had been recruited from all over the world, from 44 countries. They had come to Washington to work for FAO; and, although they knew that Washington was only a temporary headquarters, they had settled down, bought houses, entered their children in school, learned the language, got used to American ways. Then, just when they had begun to feel at home, they were confronted by a move they had not really anticipated.

But not all faced the problem of moving. For some of them it meant losing their jobs. The decision had been made not to take people in the lower grades, except those with some special skills that could not readily be replaced in Rome. It was a decision based on the conviction that employees in those grades should be of local origin, familiar with the language and with the ways of life in Rome. As a result, about half of FAO's staff were not invited to go to Rome.

The Italian Government has been rushing to completion the new building to house FAO.

Those that were invited to go had to make the difficult decision of whether to accept or refuse. Most of the determining factors were personal, and one of the strongest was the problem of educational facilities for children. There were other considerations, of course, such as the uncertain international situation, which made the decision all the more difficult.

Because the decision was a hard one to make, it took time. Not until a month or so before the first sailing, on February 17, 1951, did FAO have a clear-cut indication of how much staff it would have to move; and even then there were some last-minute changes. In the end, only about 30 percent of the staff went to Rome.

The fact that so few people decided to go precipitated not only a personnel problem but a financial one. The terminal payments to people leaving the Organization were so large as almost to create a new financial crisis.

There were to be four sailings, on February 17, March 1, March 22, and April 4. The original plan was to move one-fourth of a division at a time, so that the work could still be carried on in Washington while it was gradually being picked up in Rome. Thus it was hoped to avoid any hiatus in operations. But this plan had to be abandoned, partly because of the arrangements that had been made to dispose of FAO's space in the various buildings it occupied in Washington. The Democratic National Committee, for example, had bought one of the buildings and wanted to get into it as soon as possible. Also, space given up was money saved. Therefore, instead of moving divisions little by little, FAO had to move entire divisions at a time. A division was consequently out of commission for the several weeks required to prepare for leaving Washington, to sail, and get reestablished in Rome.

The last few months before the sailings were full of feverish activity. For FAO's official activities, arrangements had to be made for procuring promptly the publications of the United States Department of Agriculture and other Government agencies on which the Organization relies and which it had been able to get in Washington through easy and informal arrangements. Office equipment, books, and documents had to be crated and sent, and through it all the work of the Organization had to go on.

Passports had to be arranged, visas secured from the embassies representing the people who were going, vaccination "shots" taken, houses sold. Many people who had grown accustomed to the material aspects of American culture, however unnecessary they might be in the abstract, had to make and finance heavy purchases of automobiles, refrigerators, and other durable goods.

Nonetheless the move progressed smoothly. The right people boarded the right ships on February 17 and on March 1. Then the final blow struck. The second ship was caught in one of the worst storms in recent years. For a day and a half it drifted helplessly, battered by mountainous seas. Passengers could not leave their rooms, not even for meals.

They were thrown out of their bunks, were cut and bruised. Two sailors were lost overboard. The main hatch broke open, and water poured into the hold, where automobiles and household furnishings were crashing about in destructive abandon. The captain himself had doubts that the ship would survive.

But it made port at last, although it was so badly damaged that it could not make the return trip, on which it was to have picked up the fourth shipload to Italy. This default meant that those who were scheduled for the last sailing had to leave on the third. The whole careful schedule was upset. Passports, "shots," and all the rest suddenly had to be speeded up. Many persons had to call off their plans to have their families come to see them sail. But in one way or another the next-to-impossible was done, and the third ship left on schedule, carrying both the third group and most of the fourth.

Now that the headquarters is gone, some of the people who will man the North American Regional Office serving the United States and Canada are, oddly enough, many of the same people who started with FAO in Washington. Gove Hambidge, who is acting head of the office, is regarded by many as one of the prime architects of FAO. During the early days, under the Interim Commission, he took an important part in developing the whole structure of FAO and was intimately concerned with all phases of its work. Then, as FAO grew and he served successively as Director of Information and as Editorial Adviser, his field of immediate interest became more and more specialized as the Organization itself developed its specialized segments. Now, once again, he will be concerned with all phases of FAO's work, especially as it has a bearing on North America.

What the move may mean to FAO is hard to say. The problem of getting operations going in Rome is, of course, acute. All the little problems, such as the dearth of paper clips and other office supplies, are there, as well as the big problem of restaffing the Organization with the highly competent people it needs. The headquarters has been deluged with applications, 50,000 of them, from people who want to work for FAO. Some have even offered to work without pay just for the experience. Meanwhile, of course, the Organization's work in the field has continued. Its technicians are busy in all the countries it serves, helping those countries to provide better nutrition and production and distribution of food and agricultural needs for their people.

There is no reason why FAO should not continue to grow and to serve in Rome as it did in Washington. The headquarters of an international organization can be located anywhere in the world. FAO is an entity and a force throughout the part of the world that it can reach. Its real service is given to the underdeveloped areas, where it is working to realize its great objective of a world better fed, better housed, and better clothed. With the faithful support of the people who created it and believe in it and wish it well, it can go forward as they so soundly planned that it should.

Reading about... Foreign Agriculture

Japanese Village in Transition, by Arthur F. Raper, Tamie Tsuchiyama, Herbert Passin, and David L. Sills, 272 pp., illus. Report No. 136, General Headquarters, Supreme Command for the Allied Forces, Tokyo, 1950.

This book tells the story of how 13 Japanese villages have been affected by the main agrarian reforms instituted and carried out in Japan under the auspices of the Allied Occupation. In those 13 villages, which were carefully selected to represent the most various types that could feasibly be studied within the limitations of time and resources, Dr. Raper and his coworkers made two surveys—one in the spring of 1947 and another in the late fall of 1948. This presentation of their findings is the first attempt in any language to answer the crucial questions about the consequences of land reform in Japan.

Basically, the book is divided into two parts. The first is a short pictorial introduction to rural Japan of today, showing some over-all facts about the land, the crops, the way of life. The second and principal part tells of the changes that occurred in the interval between the two surveys, first, in summarization, then in greater detail, village by village. The study closes with an analysis of special phases of village life, such as farmers' problems, community organization, the family, education, and religion. The report is richly illustrated throughout.

A limited number of copies are available upon request at the Office of Foreign Agricultural Relations, U. S. Department of Agriculture, Washington 25, D. C.

Soviet Collective Farm Mergers

by LAZAR VOLIN

Soviet agrarian policy during the period between the end of World War II and 1950 was directed toward repairing the numerous wartime cracks in the system of collective farming and restoring it to its prewar rigid pattern. While it is true that no formal organizational changes took place during the war in the kolkhoz (collective farm) system, it was nevertheless considerably weakened both technically and administratively even in the uninvaded part of the USSR. A still more considerable disintegration occurred in the important agricultural regions that lay in the path of German invasion.

The wartime decline in collective agricultural production and the existence of considerable untilled land provided an opportunity for extending individual peasant cultivation. The Soviet Government vigorously fought such tendencies before the war and strove to confine individual farming of the kolkhoz peasants rigidly within the narrow legal limits of the small family kitchen garden plots. Although this policy had never been officially altered as far as the peasantry was concerned, it was nevertheless relaxed somewhat unofficially during the war, when the problem of increasing the lagging food supply was paramount. But beginning in 1946, particularly with the publication of the decree of September 19, 1946, on violations of the kolkhoz charter, the Government called for a halt of the temporary leniency and reverted to the stringent collectivist policy pursued before the war. Until 1950, however, there were no significant departures from the prewar pattern of Soviet agrarian collectivism. But, during the past year, what appears to be a new development leading to an even firmer grip of the Soviet state on Russian agriculture came to the fore with a far-reaching campaign for merging the collective farms.

This is one of the most significant developments—perhaps the most significant—since the original collectivization drive of 1929–30. In fact, the present campaign resembles the latter in its relentless speed and the vast scale on which it is being carried out by the Kremlin.

Dr. Volin is Regional Specialist, Regional Investigations Branch, OFAR.

In order to see this development in a better perspective, it is necessary to review briefly the question of the size of the collective farm unit. Kolkhozy[1] replaced the small peasant holdings that were typical of Russian agriculture before collectivization. The new farm units were formed by combining into relatively large fields the scattered strips of land cultivated by independent small peasant farmers, as well as by pooling their implements, draft animals, and some other livestock.[2]

Doubtless in the combination of factors that were responsible for the Kremlin's decision to collectivize Russian agriculture in the late 1920's, an outstanding role was played by the Marxist doctrine of the superiority of large-scale methods of production in agriculture as in industry. It became an accepted tenet of Bolshevik ideology and was powerfully reinforced by the great fascination that the tractor exercised on the Soviet leaders from Lenin down. The Bolsheviks' enthusiasm for large-scale production, unchecked by a recognition of the economic law of diminishing returns, made for emphasis on the large farm unit.

Thus, during the mass collectivization of the early 1930's, no limit to the size of the kolkhoz was set and the maxim "the larger the better" guided Soviet collectivization practice. However, in the middle 1930's the inefficiencies resulting from unlimited growth of the collective farm began to be discerned and subdivision of large farms was not uncommon. For example, four large kolkhozy in the Spassk district of Ryazan Province of Central Russia were divided into two each. On the other hand, the very small collective farms in the northern and north-central regions were long considered inefficient and "voluntary" merger of such kolkhozy was "recommended" by the decree of December 19, 1935, "Concerning the Economic and Organizational Strengthening of the Kolkhozy of the Non-Black Soil-Area."

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[1] Plural of kolkhoz.

[2] A more detailed discussion of the collective farm system will be found in the forthcoming monograph by Dr. Volin entitled, "A Survey of Russian Soviet Agriculture," in the process of publication by the U. S. Department of Agriculture.

In some regions, then, the average size of the collective farm in the middle 1930's was increasing; in other regions it was decreasing (table 1).

TABLE 1.—*Average size of kolkhozy in specified regions of the USSR, 1932 and 1937*

Region	Average number of households per kolkhoz		Average size of sown area per kolkhoz			
	1932	1937	1932	1937	1932	1937
Regions of increase in size of kolkhozy:			*Hectares*	*Hectares*	*Acres*	*Acres*
Northwestern	25	37	104	171	257	423
Central Industrial	39	55	172	258	425	638
Regions of decrease in size of kolkhozy:						
North Caucasus and Crimea	158	137	1,485	1,268	3,669	3,133
Middle and Lower Volga	197	137	2,138	1,699	5,283	4,198

Source: L. V. Sautin, ed., "Kolkhozy Vo Vtoroi Stalinskoi Pyatiletke." Moscow and Leningrad, 1939.

In 1938, the last year for which detailed data are available, a kolkhoz had, on the average, 78 households and about 3,700 acres of land, of which 1,196 acres were sown to crops—about 15.3 acres per household. Considerable regional variation, however, existed in the size of the kolkhozy. In the northern and north-central regions of European Russia, in which the terrain is dotted by forests, lakes, and marshes, the kolkhozy were small, measured in terms both of the number of peasant households and of sown area. In the fertile, densely populated regions of the central black-soil area and the northern Ukraine, there were many families per kolkhoz, but the proportion of sown area per family was low. On the treeless steppes of the eastern and southern parts of the country, the kolkhozy were large in terms both of people and land, but the size of the kolkhoz was decreasing in the 1930's. In the extreme southeast, in the mountainous districts and irrigated oases, the kolkhozy included many families but little sown area per family.

A far-reaching change, however, in the size and number of kolkhozy has been taking place since 1950 as a result of a new campaign for merging collective farms. Sporadic reports of collective farm mergers began to appear early that year in the Moscow press. The real opening gun in the campaign, however, was a statement in an election speech published in the Soviet press on March 8, 1950, by the new Moscow Party Chief and a member of the powerful Politburo, N. S. Khrushchev, who has been "sparkplugging" the merger move ever since:

> A serious defect is the fact that there are many small kolkhozy in the Moscow province. . . . Small collective farms cannot achieve the powerful expansion and development of all branches of agriculture. Is it possible to introduce systematic rotation of crops on an area of 90 to 100 hectares? Dividing the land into 8 or 9 fields, you get a field of approximately 10 hectares. . . . The tractor and the combine cannot be utilized on such a field as they should be. . . . Many collective farms in Moscow province have found the correct solution—they have embarked on the path of uniting and enlarging the kolkhozy. . . . The merging of small kolkhozy is a correct and progressive measure. The task of Party and Soviet organs is to assist collective farmers in carrying out this important task. . . .

Among other supposed benefits of large kolkhozy compared with smaller units, Khrushchev mentions a substantial reduction in administrative expenses and personnel, the inflation of which has long bedeviled collective agricultural economy, and greater possibility of employing specialists and of obtaining qualified and experienced managers. Increased production, higher incomes for kolkhoz members, and larger marketable or commercial output (and implicitly, therefore, more of the product going to the state)—such are the purported ultimate advantages of larger kolkhozy, which may be achieved by merging small units, according to Khrushchev. He soon elaborated the theme of kolkhoz consolidation in subsequent pronouncements, and, particularly in his *Pravda* article of June 28, greatly stressed the key role of managers in the consolidated kolkhozy and

TABLE 2.—*Development of collectivization, 1918–40*[1] *and 1950–51*[2]

Year	Collective farms	Households in collectives	Proportion of peasant households collectivized
	Thousands	*Thousands*	*Percent*
1918	1.6	16.4	0.1
1919	6.2	81.3	.3
1920	10.5	131.0	.5
1921	16.0	227.9	.9
1922	14.0	217.0	.9
1923	16.0	228.0	.9
1924	16.3	211.7	.9
1925	21.9	293.5	1.2
1926	17.9	247.0	1.0
1927	14.8	194.7	.8
1928	33.3	416.7	1.7
1929	57.0	1,007.7	3.9
1930	85.9	5,998.1	23.6
1931	211.1	13,033.2	52.7
1932	211.1	14,918.7	61.5
1933	224.6	15,258.5	65.6
1934	233.3	15,717.2	71.4
1935	245.4	17,334.9	83.2
1936	244.2	18,448.4	90.5
1937	243.7	18,499.6	93.0
1938	242.4	18,847.6	93.5
1939	241.1	19,300.0	.....
1940	236.3	19,200.0	96.9
1950	252.0	....	....
1951	123.0	....	....

[1] Prewar boundaries.

[2] Postwar boundaries.

Sources: 1918–38: I. V. Sautin, ed., "Kolkhozy Vo Vtoroi Stalinskoi Pyatiletke," Moscow and Leningrad, 1939.
1939–40: D. Shepilov, "Kolkoznyi Stroi SSSR," Problemy Ekonomiki, v. 1, p. 35, 1941.
1950–51: Sotsialisticheskoe Zemledelie, Mar. 3, 1951.

the necessity of paying higher salaries to them. It can be gathered from this and other published material that effective Government supervision of kolkhozy, which has always posed a serious problem to the Kremlin, has been a potent motive behind the new move. The smaller the number of kolkhoz managers the easier it is to find persons who are not only efficient but also politically reliable from the Soviet standpoint, and who will zealously deliver to the state the officially prescribed quotas of farm products.

Theoretically, kolkhoz managers or chairmen and other officers are supposed to be elected by the kolkhoz membership. In practice, this has always been largely a fiction as the kolkhoz officers are actually appointed, shifted, and removed at will by Communist authorities. This practice is doubtless even more common in the consolidated kolkhozy. On the whole, the gap between the rank and file and the management is likely to grow in these kolkhozy, with a consequent increase in the driving power of the administrators. That would certainly constitute a welcome gain from the Soviet point of view.

Much was also made in the Soviet press of the consolidated Communist Party organizations in the merged kolkhozy, enhancing the relative importance of the Communists in the new collective farm units and strengthening Communist control mechanism. This fact has no doubt quickened Soviet interest in the merger of kolkhozy, which is always represented, in accordance with Soviet custom, as originating spontaneously with the membership of the kolkhozy.

Table 3.—*Number of kolkhozy, households per kolkhoz, and distribution of sown area per kolkhoz and per household, by regions, 1938*

Region	Kolkhozy	Households per kolkhoz	Sown area			
			Per kolkhoz		Per household	
	Number	*Number*	*Hectares*	*Acres*	*Hectares*	*Acres*
North	9,722	47	154	380.5	3.3	8.1
Northwest	32,501	37	164	405.2	4.4	11.0
White Russia (Belorussia)	9,665	74	294	726.5	4.0	9.8
Central Industrial	34,146	56	259	640.0	4.6	11.4
Central Agricultural	23,041	94	518	1,280.0	5.5	13.6
Upper Volga	21,828	52	338	835.2	6.5	16.1
Middle and Lower Volga	7,003	136	1,655	4,089.5	12.2	30.1
Ukraine	27,393	141	780	1,927.4	5.5	13.7
North Caucasus and Crimea	8,779	140	1,253	3,096.2	9.0	22.1
Transcaucasia:						
Armenia	1,077	160	360	889.6	2.2	5.6
Georgia	4,190	92	174	430.0	1.9	4.7
Azerbaidzhan	3,677	88	267	659.8	3.0	7.5
Ural	14,357	83	770	1,902.7	9.3	22.9
West Siberia	14,354	63	612	1,512.3	9.7	24.0
East Siberia	6,304	62	504	1,245.4	8.1	20.1
Far East	1,191	47	566	1,398.6	12.0	29.8
Kazakh	7,347	79	700	1,729.7	8.9	21.9
Central Asia:						
Turkmen	1,654	71	227	560.9	3.2	7.9
Uzbek	8,452	89	298	736.4	3.3	8.3
Tadzhik	3,862	48	193	476.9	4.0	9.9
Kirgiz	1,849	92	474	1,171.3	5.2	12.7
Total or average USSR	242,392	78	484	1,196.0	6.2	15.3

Source: L. V. Sautin, ed., "Kolkhozy Vo Vtoroi Stalinskoi Pyatiletke." Moscow and Leningrad, 1939.

Not only the large size of the kolkhoz has been emphasized by top Soviet policymakers since 1950 but also the larger labor unit within the collective farm—the so-called brigade—as against the smaller unit, the zveno, much stressed in the 1940's.

The farm merger drive was not preceded by any public discussion of the subject and has not been accompanied so far by any legislation or published statement of the Communist Party Executive, the Central Committee of the VKP. However, the lack of such formal sanctions has not hindered the merger campaign. But since the spring of 1950, there has been no lack of articles in the Soviet press, both general and special, extolling the farm mergers and demonstrating their advantages by corroborative evidence of specific successful consolidated farms. The Minister of Agriculture of the USSR, I. A. Benediktov, stated that, as a result of mergers, the number of kolkhozy during 1950 decreased from 252,000 to 123,000. More than two-thirds of all kolkhozy were merged into 60,000 large farms. However, as Khrushchev pointed out in the above-mentioned *Pravda* article, many of the mergers so far have been effected only "legally," and unification is still to be carried out. What has actually happened is that, for example, a small kolkhoz is turned into a brigade and farm operations are carried on as before.

In this connection, it should be borne in mind that consolidation of the relatively small fields to facilitate tractor operations will be difficult to carry out in many of the northern and north-central regions, for here small tracts of arable land are crisscrossed with forests, lakes, marshes, etc.

The merger campaign, though it began in the north-western and north-central regions, was not confined to any particular locality, but spread far and wide over the whole Soviet Union, including the regions incorporated since World War II. Nor was it a matter of consolidating only small kolkhozy, of which there are many in the northern and north-central regions of the Soviet Union; large kolkhozy in the southern and eastern regions have not escaped this fate. For instance, in the Dnepropetrovsk Province of the Ukraine, unification of 866 kolkhozy resulted in 342 consolidated collective farms, with an average land area of 7,400 acres each. In the Province of Tambov in Central Russia, 2,981 kolkhozy out of 3,135 were merged into 897 farms having 5,200 acres of tillable land per farm. In Odessa Province of Southern Ukraine, 1,745 kolkhozy were merged into 639 farms by August 10, 1950. In Soviet Latvia, instead of 4,115 kolkhozy, which were originally created after the Soviet occupation, there were, at the beginning of 1951, 1,792 collective farms.

Again, as in the early days of collectivization, no recognition seems to have been given to economic limitations on the size of the farm unit or to the fact that, in the United States and other countries, efficiency and advantages of modern technology are achieved with farm units much smaller in size than the kolkhozy in the Soviet Union. The whole campaign for rapid, indiscriminate farm mergers, without regard to the wide regional variations in natural conditions and types of farming, lends much weight to the thesis that the central objective of this policy is tighter state control over collective farming under the façade of technical consolidation. It is difficult to see how collective farm efficiency can be increased, even in the long run, by reviving the gigantomania of the early 1930's, which was officially repeatedly condemned as harmful. Still it is conceivable that some increase in productivity may result from the ruthless driving of farm labor by the new management. In this connection, it should be borne in mind that the former abundance of manpower in Soviet agriculture, which permitted its wasteful use, greatly declined as a result of the war and postwar reconstruction and rearmament. For instance, the number of workers per kolkhoz peasant family between 1937 and 1950 decreased in the eastern regions of White Russia, which were in the zone of war and German occupation, by 40 percent.

There are some straws in the wind pointing toward a closer relationship between the kolkhozy and state farms,[3] which springs from the collective farm mergers. According to a report in the official newspaper of the Ministry of State Farms of the USSR, *Sovkhoznaya Gazeta*, December 28, 1950, a large state farm in the Ukraine is acting as patron for a nearby consolidated collective farm. The state farm personnel is aiding the kolkhoz in working out a new land use program and also a new 5-year plan, as well as helping with the repair of implements. It is significant that an appeal was made to the workers of other state farms in the Province to follow this example.

State farms have given kolkhozy some assistance in the past, particularly in the matter of the use of tractors, but it does not appear to have been great. Because of the inefficiency of many of the state farms, they could not (with some exceptions) serve as examples of progressive farming on which the kolkhozy could model themselves.

A pertinent question arises whether the two systems of collective and state farms will continue to coexist or whether they will be integrated into a single "socialist" type, patterned essentially on the state farms. It would seem that the trend toward growing operational control of the kolkhozy by the Government and the increase in their size as a result of the mergers point to their eventual "assimilation" in such a unified system. It is questionable, however, whether the Kremlin would be willing to substitute the regular wage method of payment for farm labor, characteristic of the state farms, for the "workday" method under which members of the kolkhozy are merely residual claimants to the kolkhoz income. And so long as the workday method of payment is retained, it is probable that the fiction of self-government and of separate existence of the collective farms, legally independent of the state farms, will also be maintained.

It would seem from various critical comments in the Soviet press and from speeches of Khrushchev that collective farm consolidation has not been as smooth a process in practice as the impressive statistics of the number of kolkhozy merged lead one to believe. Administrative expenses, for instance, in many merged collective farms have not decreased as was expected, and defects in land utilization in certain of the merged kolkhozy, which interfered with productive efficiency, were indicated. The poor qualifications of many kolkhoz managers have also been criticized by Khrushchev.

It is well to remember, however, that criticisms of details of execution, such as these, and of various bottlenecks are commonly mingled with reports of successful achievements in every Soviet campaign and drive. They do not necessarily imply the Kremlin's disillusionment with the main objectives of such campaigns or drives and this probably holds true, in the spring of 1951, of collective farm mergers. Still, judging from past experience, a reversal or retreat in this matter is within the realm of possibility, if the enlargement of many existing large farms should make collective farming more inefficient and greatly increase smoldering peasant discontent.

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[3] These are farms owned and operated by the Soviet Government with the aid of hired labor.

The merger of collective farms also brought into the foreground the question of resettlement of the collective farmers, either by enlarging existing villages or by building new ones. Such a move has been justified by Khrushchev and other Soviet spokesmen on the ground that the cultural and other communal needs of the collective farmer could be much better met in larger settlements, since it is not economical to build hospitals, schools, clubs, etc., in small villages.[4] In this way, it is hoped to diminish the contrast between the town and the country, which has often been represented as the objective of the Bolshevik agrarian policy. And it would not be considered a loss by the Bolsheviks if, in this process, the historic bonds that united neighbors in small villages were torn asunder and the historic association with the land that dates back to the period of serfdom[5] were dissolved. In fact, this may well be the crucial underlying, though unspoken, motive for the resettlement drive.

Thus, the farm merger campaign has been accompanied by reports of intensive construction activity in the countryside. It was stated, for instance, in *Izvestiya* of January 17, 1951, that "In all the provinces of the Ukraine the collective farmers are throwing themselves into the reconstruction of old villages and the construction of new ones. Many kolkhozy have decided in the course of the next ten years fully to reconstruct their raions (districts)."

In a number of the consolidated collective farms, special building brigades have been organized. This method of carrying on construction has been especially recommended by Khrushchev in a lengthy article that appeared in *Pravda* and some other Soviet newspapers on March 4, 1951.[6] He pointed out that, in the past, the kolkhozy did not help their members to build houses, making the task very difficult.

The kolkhozy should take over, according to Khrushchev, the building of homes for their members at the latter's expense, but they should give priority to those collective farmers who work well, thus providing an additional incentive to them. First priority, however, is to be given to the construction of farm buildings of various kinds—barns, farm sheds, etc. Building materials and skilled labor, however, present a serious problem, according to Khrushchev and other Soviet reports, and this does not augur well for quick resettlement. It is true that in his speech in *Pravda* on June 28, 1950, Khrushchev advocated the moving of the existing houses as well as building new ones in order to speed up resettlement. But he does not dwell on the former in his very detailed discussion of the subject, which appeared on March 4, 1951.

A question of great importance to the collective farmers in connection with the merger of kolkhozy and resettlement is that of family kitchen garden plots. The tendency toward decreasing the size of the family plots has been discernible during the past year. In his March 4th article, Khrushchev suggests that, for reasons of economy in construction, in the new farm settlements there should be only very small garden plots adjacent to the homes of the collective farmers, while the remainder of the land to which they are legally entitled should be outside the settlement, though separate from the kolkhoz fields. Thus, it would be possible to mechanize some of the farm operations on the family plots, such as plowing, cultivation, etc., which, he said, would ease the burden on the collective farms and would help to increase yields. The attitude of the collective farmers to such a suggestion, however, may be anything but favorable. They may easily fear that the proposed division of the family plots may be an opening wedge to dispossession.

All in all, the collective farm merger campaign, coupled with the official stress laid on the larger brigade subdivision of the kolkhoz, the tendency to limit the family kitchen garden plots, and the move to resettle the collective farmers represent yet another major step in making the kolkhoz more collectivist, and thus making Soviet authority over collective peasant agriculture ironclad.

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[4] It may be added, parenthetically, though this is not mentioned by Soviet spokesmen, that poor condition of the roads in the Soviet Union and shortage of transportation facilities make communications between different rural points difficult, especially during the "mud" period of early spring and fall, and, therefore, tend to make each rural settlement more self-sufficient with respect to communal and cultural facilities than would be the case in the West.

[5] *See* "The Russian Peasant and Serfdom," by Lazar Volin. *Agricultural History*, v. 17, pp. 41–61, 1943.

[6] This was a speech delivered at the special conference dealing with construction and public welfare in the collective farms of the Moscow Province on Jan. 18, 1951. In the following issues of the newspapers which carried this speech there appeared a statement to the effect that the article was published "for purpose of discussion," thus indicating that it did not lay down the official line. Some official opposition to resettlement has developed recently.

Tractor Training in India

Wall charts show how tractors are assembled.

India's "Grow More Food" campaign has enlisted the support of the Point Four program of technical assistance in the training of farm machinery operators. Sponsor of the training work is the Central Tractor Organization of India's Ministry of Food and Agriculture. CTO has responsibility for reclaiming some 3 million acres of weed-infested land, in which it is using modern motor equipment.

Earle Rambo, representing the U. S. Department of Agriculture, is on loan to the Indian Government to advise on and direct the activities.

Trainees attend school for 8 hours a day, and often return at night. Modern training aids are being used, including motion pictures, film strips, and wall charts. Classroom work is alternated with field work, in which trainees operate tractors under typical working conditions.

Representatives of tractor, machinery, tire, and petroleum industries in India are cooperating in the training work.

Student and teacher. This Indian tractor operator (left) is one of the many receiving training under the supervision of Earle K. Rambo (right).

Through on-the-job training, students learn to operate five types of tractors and various attachments.

Cultural Significance of Food*

Because of its fundamental role in the struggle for existence, food has acquired a significance in human society, beyond that of providing nourishment for the body, which is reflected in many patterns of human behavior. Food may be closely associated with feelings of security and prestige. It has an important place in many religious observances. It is linked with countless superstitions and prejudices. Thus it can arouse many emotions—pleasure, envy, confidence, and even violent fanaticism. These relationships must be taken into account in attempting to alter food consumption.

Familiar foods give a feeling of security. Conversely, lack of an accustomed food that is associated with orderliness in daily life can cause anxiety and tension. For example, during the potato famine in Ireland in 1845 and 1846, it is said that the Irish people rejected the maize sent from America for their relief and even in some instances starved rather than eat this strange food. Much the same thing has happened when wheat and millet have been given to starving rice-eaters in Asia; and when the Allied Armies imported pea-soup powder into Italy after the Second World War, the hungry population ate it with great reluctance. In a major crisis, familiar food is even more important than in normal times.

Certain kinds of food have acquired a social significance which is quite unrelated to nutritional values. Thus, in many places white bread has more prestige than brown because it was originally more expensive and its consumption was largely restricted to the higher grades of society. For somewhat similar reasons white rice enjoys high social prestige in many rice-eating countries. The roast beef of England has been a symbol of prosperity to the English poor for many centuries, being regarded as food for landowners and rich men. Even in recent times, when meat has been strictly rationed, many British families save all their meat coupons to buy the much-reduced Sunday roast, and want of substantial meat meals is felt acutely even though the diet is adequate in terms of calories and nutrients. Such foods create a feeling of self-satisfaction and confidence that other equally nutritious foods do not provide. People who are insecure or who are striving to climb a social or economic ladder sometimes hold "foods for the poor" in contempt and try to get "foods for the rich." Thus a nutritionally desirable food that is stigmatized as lowly can sometimes be popularized by first persuading well-to-do or well-known people to eat it. In the United Kingdom, for example, foods which are good and plentiful but considered humble, such as herring, have been sponsored by the Queen. Pictures of her eating herring and recipes prepared by the royal chef have appeared in the popular press.

Food can also have prestige value as a symbol of reward. Ice cream, candy, and desserts may be denied to "bad" children and given to "good" children. Again, foods can have prestige because they are considered "good for you." Often, however, there is little relation between nutritive value and prestige.

Dietary restrictions imposed by religion also play an important part in the food habits of many peoples. For example, Mohammedans may not eat pork, most Hindus will not eat beef, and some Hindu communities consume no food of animal origin except milk and milk products because their religion forbids the taking of life. Some Christian sects are also vegetarian, and others observe weekly fast days on which no meat is eaten. The Jewish religion forbids pork, shell fish, and various other foods and also prohibits the consumption of meat and dairy products at the same meal. Feeling upon such matters may run very deep. For example, one cause of the so-called Sepoy Mutiny in India (1857–58) was the alleged British practice of using animal fats to grease cartridges, which had to be bitten open by the Sepoys in loading their guns.

Through many generations of observance, religious restrictions have thus eliminated certain foods from the diet of some peoples. On the other hand, religious feasts make an important contribution to normally poor diets in many regions of the world. The Chinese, even when very poor, eat eggs and pork on the traditional festivals of the year and during special ceremonies on the occasion of births, deaths, and marriages. Poor Greek families eat lamb

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*Reprinted from *Teaching Better Nutrition: A Study of Approaches and Techniques*, Food and Agriculture Organization of the United Nations, Washington, Nov. 1950.

at Easter and on Sundays whenever possible, and this is sometimes the only meat which they obtain.

Superstitions and prejudices also influence food habits. In some countries certain foods are believed to have magic properties for good or evil. Eating them, it is believed, may influence the weather or the crops or may drastically affect sexual potency. Such deep-rooted superstitions are hard to alter. Some useful foods, also, are disdained as "food for animals" rather than for man. In parts of Great Britain, for example, certain green vegetables which used to be eaten by people are now considered "cattle fodder," and Northern Europeans in general have little appetite for maize, which tends to be regarded as "chicken feed." In other words there are many modern echoes of Dr. Samuel Johnson's scornful definition of oats—"a grain which in England is generally given to horses but in Scotland supports the people." In some countries, also, eating certain animals is felt to be equivalent to eating friends; thus, the horse is not eaten because it is an honored friend of man. An old Chinese peasant refused canned corned beef offered by the American Army because he regarded the ox as a familiar working companion. But in some parts of Asia, dogs are eaten, a practice which would be abhorrent to North Americans.

In many cultures, the preparation of food follows traditional methods dictated by religious beliefs, and these beliefs and practices must be understood in order to introduce new foods and new cooking methods. Among Mohammedans in India, for example, meat must be killed according to the Halal method. This involves slitting the throat of the animal while holy verses are read, and allowing the animal to bleed to death. The Jewish religion also regulates the slaughter of animals. Hindu food must be prepared by Hindus and certain communities will eat only food which has not been touched by anyone outside the group.

The meal pattern of a group is important. For example, the meal may be based on one or two staple foods of vegetable origin, such as rice in Southeast Asia or maize and beans in Mexico, or it may be built around a "main course" in which an animal food is an important ingredient, as in Western Europe and North America. The number of meals eaten daily also differs from place to place. Information on these points gives an indication of the easiest place to introduce a new food into the existing pattern so that it is readily accepted. In the United States and the United Kingdom, for example, where the central part of a substantial dinner is usually some form of meat, people tend to think that a meatless meal is scarcely a meal at all. Educational programs in the United Kingdom during the war contained many suggestions for using other foods as meat substitutes.

The customary division of food within the family is of great significance. Does the family eat together or does the man eat first and the women and children separately? Which members of the family obtain the largest share of the more nutritious foods or of foods available in time of shortage? Is it likely that supplementary food distributed to households, such as dried milk, will reach the members of the family who need it most, or must some other method be used to ensure that they receive it? A diversity of cultural and economic factors influence these practices. It has been observed that in Scottish mining families the meat ration for the family is sometimes consumed almost entirely by the father, while the children and the mother eat unrationed substitutes. Much the same division of available supplies was observed among United States mining families during the depression. The practice results from a deep-rooted conviction that the wage-earner must have meat to keep him strong and able to work. Children may come next in order of priority, and, finally, the mother. Among the other groups, the order may be a different one.

Attitudes toward a particular food vary widely from culture to culture. This is particularly true of milk. In many parts of the world, milk is considered of primary importance for its health-giving qualities, especially for children, invalids, and old people. Liquid milk is usually believed to be more beneficial than powdered milk or other forms of milk such as cheese, which may be considered as "equivalents" of foods other than milk. Cheese, for example, is often regarded as a meat substitute. In most countries milk is rightly regarded as a food of the utmost importance for children, but the idea may be carried to extremes. Parents may consider it a food of almost magical value and think that their children will rapidly weaken and die unless they consume it in prodigious quantities daily. Mention may also be made of the strange notion that it is dangerous to mix milk with certain other foods such as fruits and fish.

Some American Indian tribes consider milk disgusting. And it has been said that they may even refuse beef "because it tastes like milk." However, a

Yugoslavian farm family at supper. The world's food habits are deeply rooted in tradition and often have special social or religious significance.

few northern tribes especially prize the udder of milk-giving doe caribou, which is regarded as a strength-giving food and permitted only to men. In recent years, a particular brand of canned milk has been recommended to the Papago Indians in Arizona, as a substitute food for babies when breast feeding is impossible. As a result, it is the proprietary product, and not cow's milk itself, which is considered the appropriate food for babies, and the product is not associated in their minds with cow's milk. The use of a trade name in an educational program is often unfortunate, for people learn to have faith in a particular form or brand of food and may not realize that others can be used in its place if it is not available.

In parts of Southern Europe, fluid milk is rarely used except in coffee or by small children. Cheese, on the other hand, is a popular food. Dried milk distributed by UNRRA was accepted by Italian school children when it was mixed with water to form a spread resembling cheese, although reconstituted milk was refused. In most parts of Western and Northern Europe, fluid milk, cream, butter, and cheese are common dietary articles, but there are some places in which milk is believed to be a dangerous food. This belief is no doubt based on the fact that local milk supplies are unhygienic, but the feeling may be carried over even to uncontaminated, reconstituted dried milk.

Milk, in common with many other foods, is often the subject of religious and social restrictions. Romanians do not consume milk or butter during long fasting periods. In orthodox Judaism, the sale, cooking, and consumption of milk are strictly regulated. Among some African tribes, women may not do the milking; among others, the milk of various animals is prohibited to certain age and sex groups. Among the Kababish, men drink only camel's milk; women, cow's milk; and children, goat's milk. In other tribes, such as the Banyankole of the Lake Region, milk is reserved for the "nobles." In contrast to the Western practice of giving an extra share of milk to pregnant women, the Masai of the Lake Region of Africa dilute the milk these women receive.

Milk is popular in some parts of Asia, but in Japan and Burma and among the more conservative groups in China, milk and milk products are considered undesirable food for adults. This is probably because people have become unaccustomed to consuming these foods during centuries of shortage and because any milk available is of poor quality and grossly contaminated. Although some Hindus will not touch animal foods, milk is an exception; it is not only accepted but highly prized.

Anyone attempting, therefore, to increase a country's consumption of milk, or any other food, must study the relevant attitudes and practices of the people and plan an educational campaign in the light of that knowledge. Persons sent to developed countries for training as nutritionists have often, on their return home, attempted to apply what they have learned without adapting it to local conditions. For example, a commonly used technique in the United States is to classify foods into seven basic groups according to their nutrient content and to recommend that certain quantities of foods from each group be eaten every day. In many countries this approach, which involves a choice from a wide range of foods and the consumption of a large quantity of milk, is quite unsuitable. A more successful approach may be to teach how the nutrient content of the staple foods can be improved and how the diet can be effectively supplemented by a few other foods of high nutritive value.

Altering Food Habits

Food habits are not static. Though many obstacles stand in the way of modifying them, they are constantly changing in a changing world.

In general, diet improves with improved economic status. This has been pointed out by many workers in the field of nutrition. When money is plentiful, people tend to buy more of the expensive foods of high nutritive value, especially animal foods. In countries where refined foods have high prestige, however, increased income may mean a change from high-extraction to low-extraction cereals, thereby reducing to some extent the amount of minerals and vitamins of the B group in the diet. Moreover, when economic conditions are improving, better nutrition may at first be sacrificed for other things associated with higher living standards, such as radios, furniture, or automobiles.

Numerous examples could be given of a gradual change in dietary patterns caused by the introduction of new processed foods and new cooking and packaging methods. Dietary changes also result from alterations in the structure of society, as for example the increasing shortage of domestic servants. Yet, a campaign which tries to alter existing customs abruptly often meets with an unfavorable response. Margaret Read of the Colonial Department, University of London, Institute of Education, tells of an old woman in a Central African village, who said to her, "You Europeans think you have everything to teach us. You tell us we eat the wrong food, treat our babies the wrong way, give our sick people the wrong medicine. You are always telling us we are wrong. Yet, if we had always done the wrong things we should be dead. And you see we are not."

Resistance to change may sometimes be justified, for efforts to alter established food habits can do more harm than good unless their implications are fully understood. It is dangerous, for example, to teach people to drink milk and eat raw salads when the available supply is contaminated. Again, in Central America, the traditional method of preparing maize by soaking it in lime water adds calcium to the diet; in such circumstances the popularization of modern maize preparations would be nutritionally undesirable. Well-meaning people have attempted to reduce the consumption of indigenous fermented drinks such as pulque in Central America and kaffir corn beer in Africa, but this could endanger supplies of C and B vitamins.

A "mixture" of diets associated with different cultures may be disastrous, for the bad points of each may be adopted. A recent survey of nutrition among Indians in Northern Manitoba, Canada, for example, shows that their physical condition has deteriorated markedly since their consumption has been changed from "local" to "store" food. Refined foods purchased from the trading station have taken the place of many indigenous foods, but many of the more nutritious foods eaten by the white population of Canada are not available to the Indians because they cannot afford to buy them. Tooth deterioration resulting from somewhat similar causes has been observed also among the Maoris in New Zealand. Emigrants from Central Europe to the United States in the nineteenth century often adopted the habit of eating white bread instead of dark because of its prestige as rich folks' food in their home countries. In the diet which they adopted in their new environment, however, there was no compensatory source of B vitamins.

With the rapid spread of modern civilization during the present century, many people are in a transitional stage between old and new cultures. Too rapid an advance can create grave difficulties. For example, a colonization scheme to relieve population pressure among American Indians has resulted in lifting them from their accustomed environment of "subsistence economy" and placing them suddenly on the same footing as the white population, dependent on stores for food and other consumer goods. The result is often debt and a worse diet than before.

The closer a program to effect changes in the lives of people is linked to established customs and habits, the more successful it is likely to be. Alexander and Dorothea Leighton, working among the Navaho Indians in the United States, found them more willing to accept medical treatment from the Indian Service Hospital and to adopt more hygienic practices when the treatment resembled those used by the medicine men and when explanations and instructions were based on the beliefs and practices of the tribe. For example, in their native medical practice the Navahos rub the body with herbal concoctions and then drink what is left over; consequently, some hospitals found it advisable to provide a liniment for external application when an internal medication was being given. The Leightons suggest that Indians might be more willing to remain in hospital for treatment if the medicine men were asked to carry out some part of their curative ritual while modern treatment was being given by the white doctors. They suggest ways by which various diseases, among them malnutrition, can be described to the Indians in the terms that they will understand.

In effecting a change in established food habits, the psychological factors are equally important. Wherever possible, it is better to encourage the increased use of a known food of good nutritive value than to try to introduce new foods. For example, in Puerto Rico the use of nutritious foods which are already acceptable, such as calabaza (yellow squash), is advocated as part of the nutrition program. Milk is usually taken as café con leche (coffee with a large percentage of hot milk). It has been found relatively easy to add dried milk to the Puerto Rican diet by encouraging its use in this form. If entirely new foods are to be popularized, the methods of preparation advocated should, as far as possible, be familiar or the foods should be incorporated into dishes already in common use.

Britain Ends African Peanut Scheme

By ALEX D. ANGELIDIS

The announcement early this year of the inability to fulfill the original aims of the 3,210,000-acre British East African peanut scheme marked the end, for the time being at least, of a much-publicized phase in British colonial experience.[1]

It was also announced that, under a new 7-year program of operations, emphasis is to be directed away from the large-scale production of peanuts and peanut oil and toward broad experimentation in land clearance and mechanized agriculture under tropical conditions.

The proposal to grow peanuts in East Africa on a large-scale, mechanized basis was advanced in early 1946 by the managing director of the United Africa Company, Ltd., said to be the world's largest trading company. United Africa Company is a subsidiary of Unilever Brothers, Ltd., the world's most important maker of margarine and soap. In view of the then-prevailing world shortage of fats and oils, the idea was readily approved by the British Government. It also afforded an opportunity to demonstrate how scientific agriculture would improve productivity, health, social welfare, and prosperity in Africa.

The United Kingdom was short of vegetable oils such as cottonseed, soybean, coconut, palm, sunflower seed, and peanut. It was particularly short of peanut oil because supplies from India, traditionally a major source, were no longer available in large quantities owing to increased consumption in India. Peanut oil is very important in Britain in making margarine, cooking oil (shortening), and salad oil. Moreover, peanut cake and meal make excellent cattle feed, also short in Britain.

Mr. Angelidis is Economist, Regional Investigations Branch, OFAR.

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[1] See also *Britain's African Peanut Project*, by Howard Akers, *Foreign Agriculture*, May 1949, pp. 111–114.

The British word for peanuts is groundnuts.

Thus, when the Government mission dispatched to East Africa in June 1946 submitted in the following September a favorable report as to the possibilities of growing peanuts, the British Government engaged the United Africa Company as managing agent to begin work in Tanganyika, British East Africa, early in 1947.

Plans called for the expenditure of a total of 24 million pounds sterling ($67 million at the current rate of $2.80 to the pound) on the establishment over a 6-year period of 107 30,000-acre plantations in Tanganyika, Northern Rhodesia, and Kenya. It was expected that an annual goal of about 600,000 long tons of peanuts would be harvested by 1950–51. The first year's operations were to be limited to 150,000 acres in Tanganyika, where units were to be set up in the Central Province at Kongwa, in the Western Province at Urambo, and in the Southern Province at Lindi.

From the beginning, operations were beset with difficulties. Port and transportation facilities had to be set up to handle the huge quantities of materials. New equipment, especially tractors and bulldozers, was not available immediately after the war, and it was necessary to use war-surplus equipment. Much of the equipment was military in design and had to be converted for land-clearance work. It was in need of constant repair and overhauling because of age and hard usage in the wild bushland. The hiring and housing of personnel—especially European—also proved difficult immediately after the war. It was necessary, moreover, to rid the area of the tsetse fly, which carries the germ of sleeping sickness.

A basic difficulty in the undertaking was the lack of earlier experience in land clearing and cultivation under African conditions. The bush roots resisted the efforts of the root rippers. The hard soil impeded the planting, development, and harvesting of the peanuts. Rainfall was not plentiful. The clay content of the soil resulted in compaction during dry periods. Consequently, at the end of 1947–48, only some 7,000 to 10,000 acres were under cultivation, and the total output of 1,600 long tons of peanuts was retained for seed. Activity had been concentrated at Kongwa because of accessibility.

At this time, the British Food Minister transferred responsibility for continuing the work to the Overseas Food Corporation, a Government-sponsored public corporation created in 1948 for the purpose of producing food and other agricultural products outside Britain. It had been intended from the outset that a public corporation would take over the long-term work as contrasted with the largely experimental work in 1947–48. The managing director of the United Africa Company was appointed to the board of this corporation.

The rising costs of operation and the small output in the first year gave rise to criticism of the scheme and its managers in the House of Commons. The Government emphasized the urgency and importance of the work and stated that there was no cause for alarm as long as it appeared that the market price of peanut oil would remain above anticipated production costs. Extensive calculations had been made by the mission in 1946 of probable costs in order to show the savings to the British people of obtaining peanut oil in East Africa as compared with other sources.

A year later, in 1949, the British Food Minister announced that the annual goal of 600,000 long tons of peanuts could be achieved by planting only 2,000,000 acres instead of the 3,210,000. This could be done through more intensive farming. It was admitted that the speed at which large-scale clearing could be done had been miscalculated. In addition there would be crop rotation with sunflower, whose seed is also rich in oil, as the intermediate crop.

At the end of 1948–49, the first year of operations under the Overseas Food Corporation, there were some 53,000 acres under cultivation, including sunflowers and corn as well as peanuts. Output for that year included 2,150 long tons of peanuts and 800 tons of sunflower seeds. The poor results in sunflower-seed output was due to a heavy incidence of rosette disease in the Urambo region and, it was thought, to restricted bee activity during the pollination period. Drought conditions affected both crops. Operations had been extended to the Urambo area during the year.

Plans for the 1949–50 season provided for the use of 104,000 acres, but with sunflowers rather than peanuts being planted on newly cleared land. This emphasis on sunflowers was in part due to the difficulty of planting, cultivating, and harvesting an underground crop in hard soil.

After 1950, all new clearing operations were to take place at Lindi in the Southern Province of Tanganyika, with the expectation that 100,000 acres would be cleared by 1951 and that 600,000 acres would be ready for the 1954 harvest. The Lindi region was chosen because it had better soil and rainfall. Operations in this region were not undertaken from the outset owing to its inaccessibility until railway and port facilities were provided.

The slow, costly progress of operations and the frequent announcement of revisions in the scope and content of the undertaking gave rise to more criticism of the scheme and the Government in debates in the House of Commons. These debates emphasized the difficulties that beset the Overseas Food Corporation, including accounting irregularities and internal dissension. The Government opposed a public inquiry, which was requested, on the grounds of the possible adverse effects that interference in operations would have on the morale of the personnel in Africa, already reported to be poor because of criticism in the House of Commons.

The House of Commons Committee of Public Accounts, in its review in June 1950 of the first annual (1948–49) report of the Overseas Food Corporation, stressed the fact that the urgency of need for peanut oil outweighed the risks taken to obtain early results. It concluded that the long-term undertaking proved impracticable because of the postwar shortage of needed equipment and personnel. Moreover the high cost (nearly all of the funds allocated for the 6-year program had been used up in the first 2 years) and disappointing results could be attributed to the lack of time for proper planning, to the difficulties of land clearance, and to the poor soil and climate. The committee regarded as "seriously misleading" the report of the mission of 1946, whose recommendations were followed.

By the end of June 1950, crops were harvested on somewhat more than half of the 83,000 acres under cultivation. The harvest included 1,500 long tons of peanuts, 1,800 tons of sunflower seeds, 850 tons of corn, and 180 tons of sorghum. The poor showing for this third year was attributed largely to the failure of the sunflower crop because of drought. Operations at Kongwa were restricted by a fuel shortage. The drought made it necessary to transport water instead of fuel. When the rain finally came, it damaged the railway. There was also a weed problem at Kongwa.

In the summer of 1950 the British Food Minister announced in the House of Commons that attempts to produce large quantities of peanut oil in East Africa would be given up and that the project would be turned into a plan for colonial development with a varied agricultural content. This was a preliminary reference to a proposal formally advanced late in 1950 and announced in a British White Paper made public on January 9, 1951.

Under the revised program, which is expected to run to 1957, the scope of activities in British East Africa is to be curtailed. Land-clearance work is to be reduced. Some land is to be put under crops, and some given over to grazing. Hand labor is to be used in large measure in place of tractor power. The size of agricultural units is to be cut from 30,000 acres to between 1,500 and 6,000 acres. This reduction is intended to make possible more intensive supervision. Total area is to be 210,000 acres as compared with the 3,210,000 acres contemplated in the peanut scheme. Work is to be concentrated in the Southern Province, where 60,000 acres are to be cleared by 1954.

Over the 7-year period the cost is estimated to be 6 million British pounds sterling ($17 million at the current rate of $2.80 to the pound), without allowing for land-clearing contingencies after 1954. This figure compares with a total of about 36.5 million pounds ($102 million) expended on the peanut scheme. Operations are to be carried out under the Colonial Office instead of the Ministry of Food. The expectation for 1950–51 is that there will be 65,000 acres under cultivation, half peanuts and half corn, sorghum, and millet.

In summary, the attempt to grow peanuts did not produce the expected large quantities owing to difficulties whose seriousness was not apparent at the outset largely because of the absence of pilot experiments. Once started, the work revealed problems peculiar to large-scale, mechanized agricultural undertakings under tropical conditions. Not only was it difficult, with the machinery available, to clear the wild bushland, but also it appeared that the unfavorable climatic and soil conditions were not conducive to optimum yields. The situation was complicated further by the difficulties of securing, training, and housing an adequate labor force.

Despite reductions in the scope and content of the plan, the difficulties proved to be insurmountable within the time set. Disappointing results and pessimism as to the project's success led to bitter criticism in the press and in the House of Commons. Finally, the Government made known the abandonment of the scheme, and, in its place, the experiment in tropical agriculture was announced. Although the scheme has been a disappointment, experience gained from it may prove useful in formulating plans for agricultural programs in underdeveloped areas under the Point Four and other technical assistance programs.

Indonesia in the World Economy —Part II

by DORIS DETRE RAFLER

World War II and the political strife that followed disrupted agricultural production in Indonesia.[1] As a result, output of food grains, especially rice, and of export crops dropped substantially.

Much of the war damage still exists and there is the immediate problem of repairing physical destruction of agricultural, highway, railway, and port facilities. In addition, the population pressure on the fully cultivated land makes it imperative to increase yields by improving irrigation facilities, using more fertilizer and improved seed strains, increasing the supplies of farm equipment, and expanding credit and extension services. Efforts in this direction are being hampered by continuing civil disorder, strikes, and a shortage of domestic and foreign capital. Progress is being made. The first year of Indonesian independence found production of rice, the principal native food, at roughly its prewar level. With the exception of rubber, however, production of export crops is still considerably below prewar. Details as to the current status of agricultural production are given below:

RICE. During 1936–40, average annual production of milled rice was 7 million short tons. Under the Japanese occupation, productivity decreased, and droughts in the early postwar years further cut output. Thus, together with food grain production as a whole, the rice output dropped by 30 percent. In 1950, however, rice production stood at 7.5 million tons. Domestic production has for decades (except in 1940) been supplemented by imports; current import requirements are estimated at 300,000 to 500,000 tons, or somewhat above the prewar average.

RUBBER. Peak rubber production was reached in 1940 and 1941 with an average of 640,000 short tons. Under the Japanese occupation, tapping was almost discontinued, but, since 1948, recovery has been rapid. Estimated exports in 1950 amounted to 710,000 tons and thus exceeded the prewar average.

SUGAR. Before the Japanese occupation, production averaged 1.5 million tons and capacity 2 million tons. Having sufficient sugar acreage under their control already, the Japanese cut capacity to one-third. Subsequently the production of sugar was greatly affected by theft and arson by political extremists. It is estimated that maximum output in 1950 may have been somewhat under 300,000 short tons.

COPRA. Before the war, Indonesia was the world's largest producer of coconuts and ranked second to the Philippines in copra exports. Copra is the fourth leading export of Indonesia in volume and value, even though about as much is used domestically as is exported. Exports averaged 593,000 short tons during 1935–39. Closing of world markets in 1940 severely hit the large population dependent on coconut cultivation. In order to support the industry, the Government established the Copra Fund, a central purchasing, storing, and export organization. On December 1, 1950, the Fund was reorganized and renamed the Copra Foundation. Currently charged with increasing production and exports, it is hampered by the break-up of its collection and transportation system. Increased domestic consumption in 1950 reduced exports to 267,000 short tons compared with 340,000 tons in 1949.

PALM OIL AND KERNELS. The palm industry was in the process of rapid expansion before the war, with record production of 537 million pounds of oil and 119 million pounds of kernels. Of this amount, approximately 90 percent was exported. During the Japanese occupation and subsequent civil strife, many palms were uprooted and plantations were neglected. Recovery is hindered by shortage of labor. Currently the oil pressing factories are for the most part repaired, and, while production and exports are still at about 70 percent of prewar, estimates indicate that prewar levels of production will be achieved by 1952–53.

TEA. Before the war, Indonesia was the third largest producer and exporter of tea, with average exports of 153 million pounds. During the war, about a third of the acreage was converted to other crops. Despite the increased number of plantations, production and exports in 1949 were still only a third of prewar and less than half of prewar in 1950.

TOBACCO. Before the war, Indonesia followed the United States as a leading tobacco exporter. Leaf tobacco exports averaged 108 million pounds. Exports in 1950 amounted to about 14 million pounds. This small volume reflected military and guerrilla activities in the producing areas.

CINCHONA. Production of cinchona, from which quinine is extracted, has been reduced as a result of

Mrs. Rafler is International Trade Economist, OFAR.

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[1] For a comprehensive study of the prewar situation *see* W. Ladejinsky, "Agriculture of the Netherlands Indies," *Foreign Agriculture*, September 1940, pp. 511–574.

an estimated postwar decline in demand due largely to the availability of synthetics. Exports in 1949 totaled 5.7 million pounds, or less than 40 percent of prewar. Since Korea, quinine exports have risen.

COFFEE. Coffee production in 1949 amounted to 33,000 short tons compared with an average of 130,000 in 1935–39. Production continues low because of transport difficulties, the neglect of trees during and after the Japanese occupation, and civil disorders in the producing areas. Domestic demand exceeds output, and, as is true for sugar, exports are possible only as a result of directed Government policy.

KAPOK. Before the war, kapok exports averaged more than 20,000 short tons. Estimated exports in 1949 were 7,000 tons; part of the decline was accounted for by decreased demand in the United States as a result of widespread use of fiber glass.

HARD FIBERS. The production of sisal and abaca in 1939 reached 240 million pounds, nearly all of which was exported. Since virtually no plantings were made between 1941 and 1947, total output will remain low for years although large acreage is being put under cultivation.

PEPPER. Exports of black and white pepper from Indonesia averaged 65,000 short tons annually in the prewar period of 1935–39 and constituted 90 percent of world exports. The Japanese ordered the uprooting of many vines to make way for increased food and fiber production. Currently, high labor costs, civil disorders, and fertilizer shortage are impeding production. Exports in recent years have been at less than one-tenth of prewar, partly as a result of speculative withholding from the market in the face of rising prices.

MINING AND INDUSTRY. In mining and industry as a whole, production is likewise below prewar, although some industries, such as bauxite, are developing rapidly and tin production and exports are exceeding prewar. Indonesia has the only important oil fields in the Far East and petroleum exports in 1950 were nearly at prewar rates. However, the high cost of drilling, political instability in the producing areas, the high taxation rate, and the possible nationalization plans of the Government are discouraging the development of new oil wells by foreign enterprise. Coal output has been retarded as a result of heavy war damage. In 1940, with an output of nearly 2 million tons, Indonesia was almost self-sufficient in coal; production in 1950 was 780,000 metric tons, an increase of one-fifth over the preceding year.

Industrial output, consisting mainly of the work of small or family units, was 60 percent of the prewar level in 1949. The development of native industries gained its first impetus during the depression, when fallen export earnings were insufficient to finance needed consumer goods imports. While industrial development is one of the key economic planks of the present Indonesian Government, lack of foreign exchange with which to import raw materials and machinery and a shortage of skilled labor, electric power, and transportation facilities are deterring industrial expansion.

The Government's Economic Plan

After the conversion of the Indonesian Federation (the United States of Indonesia) into a unitary state on August 14, 1950, the new Prime Minister, Dr. Natsir, disavowed some of the economic policies of the Indonesian Federation. His main objectives were the same as those of the Federation—attaining domestic stability, maintaining and improving the value of the currency, and increasing production and exports. However, much of the preceding government's effort had been weakened by preoccupation with plans for large-scale industrialization, nationalizing existing industries, and reducing foreign participation in the economy of the country. The revised statements of economic policy issued by Natsir moderated some of the extremist plans. In stating his program, Natsir reaffirmed the goal of changing the old "colonial" economy directed toward agricultural production for export into a national economy with a larger industry and more diversified agriculture. However, he stated that the attainment of this goal was hampered by measures required immediately to raise the standard of living.

To bring this improvement about, the Government expected to make available credits totaling $80 million for expanding native imports and exports, reconstructing war-damaged enterprises, small farming, and fisheries, and purchasing railway equipment. In general, Dr. Natsir said the Government would try to increase the productive capacity for both home consumption and exports and to create a balanced relationship between the various economic groups, with particular regard to the position of farmers and workers; to increase imports of consumer and capital goods, especially those that could develop and improve home industry; and to encourage the establishment of cooperatives.

Dr. Natsir went on to say that trade relations would be fostered with countries able to supply Indonesia with needed goods, and that closer ties would be sought with other countries in Southeast Asia. Trade agreements with Australia and India are steps in this direction. Further international economic ties may result from Indonesia's participation in international commodity agreements.

In the industrial field, he announced that the textile industry, the manufacture of agricultural equipment, industries supplying consumer goods, and those processing native-grown commodities would

Street market in the ancient town of Kota-Gede, Java.

be singled out for development first. He recognized the need for foreign capital and was willing to guarantee favorable conditions for investment of foreign capital in certain cases, with the provision that existing foreign enterprises would be required to train Indonesians for executive positions and permit the investment of Indonesian capital. Under present regulations, foreign enterprises are taxed at the rate of 40 percent, and foreign exchange certificates must be bought up to 200 percent of the value of money remitted to foreign countries. In addition, export duties and other levies are imposed. Netherlands investors report satisfactory remittances despite these regulations.

In effect, this means that the Government is abandoning for the moment large-scale development schemes and is concentrating on the development of rural and district economy. In setting this as an objective, the Indonesian Government is acting in accordance with our Point Four planners who realize that satisfaction of the "felt needs of the people" should be the primary task in the development of underdeveloped areas. The new Government's primary objective for economic rehabilitation is the formation of a "people's producing organization" relating to products vital in the Indonesian economy, such as rice, rubber, tea, copra, kapok, pepper, and coffee. One of the main efforts will be directed toward the formation of agricultural cooperatives. The Government has announced plans to change the people's banks into village cooperatives; to carry on a large-scale training program for cooperative officials and managers; to set up production cooperatives particularly in agriculture, fisheries, and cattle breeding; and to grant subsidies to cooperative organizations.

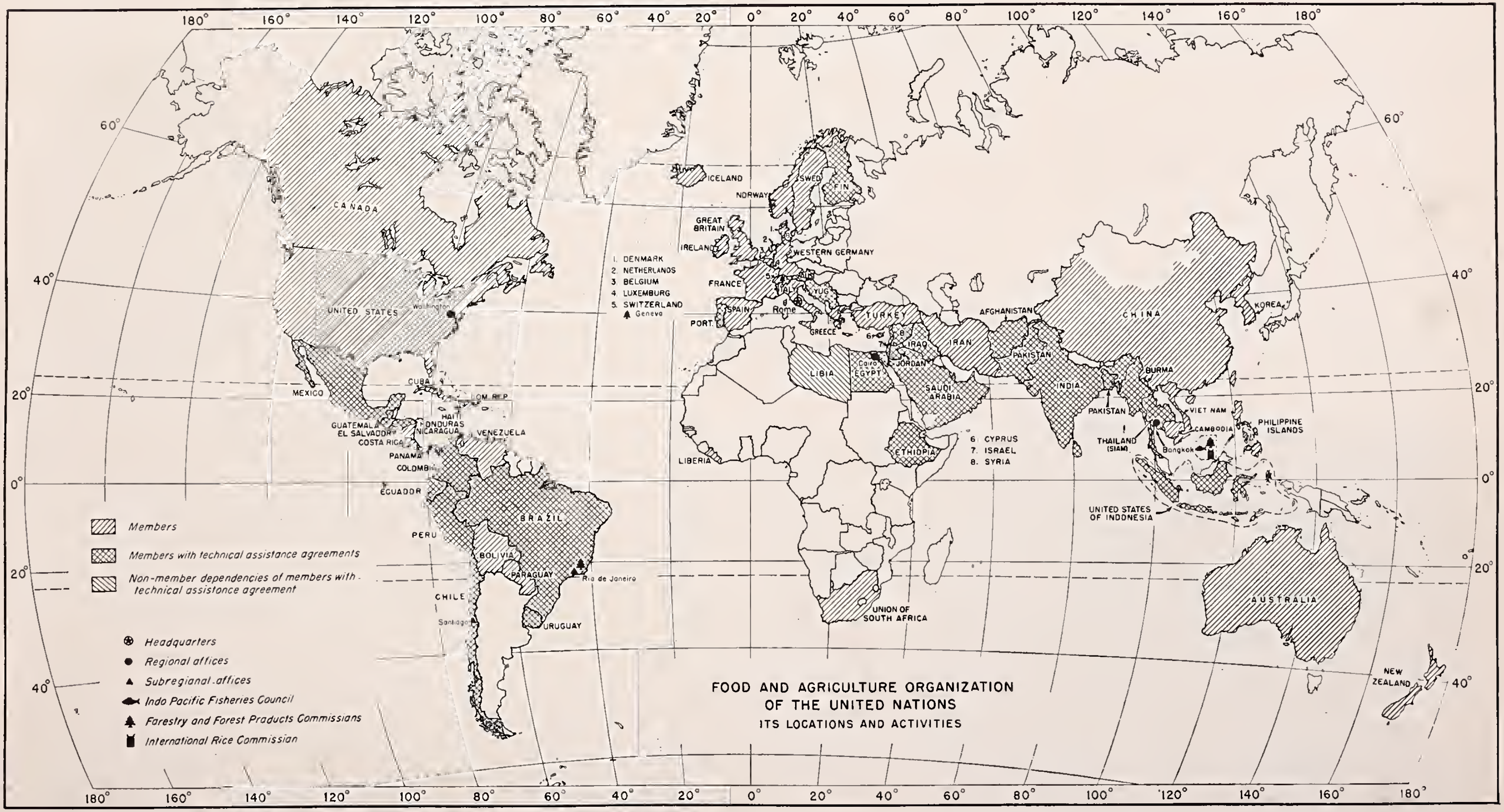
In order to stimulate the cooperative movement, management units are being set up in the villages. A course in cooperative organization will be established in each residency, consisting of several villages. The Government plans that by the end of 1951 each residency will have trained about 5,000 persons who will then be the backbone of the cooperative movement. The Government also expects to have completed the training of 90 supervisory officials.

The Outlook

Since the war, revival has been limited to a few sectors of the economy. Repair and replacement of port, railway, highway, and agricultural facilities have proceeded slowly. Financial problems, internal and external, will continue to hamper rehabilitation. The colonization and acreage expansion of the less densely populated areas are long-range projects. But such is the faith of the United States in the basic vitality of the country that the Export-Import Bank in February 1950 authorized credits up to $100 million for financing projects that are most essential to restoring and developing the Indonesian economy and that require services and materials from the United States. In addition, the Economic Cooperation Administration is currently making available $40 million to Indonesia; technical assistance and equipment for establishing health, agricultural, and training services bulk large in the ECA program. Small agricultural hand tools, equipment for fishing and lumbering, and technical aids for management of forests will be provided.

Furthermore, an Indonesia–United States agreement was signed on October 17, 1950, at Djakarta, providing for economic cooperation between the two governments and for technical and economic assistance by the United States to Indonesia following the recommendations made by the American economic survey mission that had visited Indonesia.

Geographically, Indonesia dominates the passage between the Pacific and Indian Oceans. As a member of the United Nations and of the General Agreement on Tariffs and Trade, Indonesia is in a position to influence the development of the Far East in the directions of freedom and free trade on which these international institutions are predicated.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